



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE  
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION  
FOR THE ADVANCEMENT OF SCIENCE.

EDITORIAL COMMITTEE: S. NEWCOMB, Mathematics; R. S. WOODWARD, Mechanics; E. C. PICKERING, Astronomy; T. C. MENDENHALL, Physics; R. H. THURSTON, Engineering; IRA REMSEN, Chemistry; CHARLES D. WALCOTT, Geology; W. M. DAVIS, Physiography; HENRY F. OSBORN, Paleontology; W. K. BROOKS, C. HART MERRIAM, Zoology; S. H. SCUDDER, Entomology; C. E. BESSEY, N. L. BRITTON, Botany; C. S. MINOT, Embryology, Histology; H. P. BOWDITCH, Physiology; J. S. BILLINGS, Hygiene; WILLIAM H. WELCH, Pathology; J. McKEEN CATTELL, Psychology; J. W. POWELL, Anthropology.

FRIDAY, NOVEMBER 15, 1901.

THE GEOLOGY OF ORE DEPOSITS.\*

## CONTENTS:

*The American Association for the Advancement of Science:—*

*The Geology of Ore Deposits, I.:* PROFESSOR C. R. VAN HISE..... 745

*The Physical Sciences at the British Association:* DR. A. LAWRENCE ROTCH..... 757

*Scientific Books:—*

*Bernadou on Smokeless Powder:* PROFESSOR CHARLES E. MUNROE. *Leffmann and Beam on Food Analysis:* DR. H. W. WILEY. *Packard's History of Medicine in the United States:* E. F. C..... 767

*Scientific Journals and Articles*..... 771

*Societies and Academies:—*

*American Mathematical Society:* PROFESSOR F. N. COLE. *Section of Geology and Mineralogy at the New York Academy of Sciences:* PROFESSOR R. E. DODGE. *Botanical Seminar of the University of Nebraska*..... 772

*Discussion and Correspondence:—*

*Preglacial Drainage in Southwestern Ohio:* PRESIDENT W. G. TIGHT. *Permanent Skin Decoration:* H. NEWELL WARDLE. *Magazine Entomology:* MARTHA McCULLOCH-WILLIAMS, J. B. S..... 775

*Current Notes on Physiography:—*

*The High Plains of Colorado, Kansas and Texas;* *South Shore of Hudson Strait; The Origin of Waterfalls:* PROFESSOR W. M. DAVIS..... 778

*Current Notes on Meteorology:—*

*Meteorological Equipment of the 'Discovery,' Charles Meldrum; Bibliography:* PROFESSOR R. DEC. WARD..... 779

*Scientific Notes and News*..... 780

*University and Educational News*..... 783

## I.

I SHOULD hardly have ventured to talk on the subject of ore deposits to an audience which contains many men much more familiar with mines than I, if I had not approached the subject from a different point of view. The point of view from which the subject of ore deposits has been most frequently considered has been that of a study of ore deposits themselves. A geologist or mining engineer has studied this or that ore deposit, or a number of ore deposits in different districts, and has then generalized concerning the ore deposits of other districts, and perhaps of the world. I also have considered the subject of ore deposits to some extent from that point of view, but if I had done this only, I should not have ventured to give a general address upon the subject.

A number of years ago I began the study of the alterations of all rocks, by all processes and by all agents, in order, if possible, to ascertain how it is that the rocks change from one form to another. That rocks are metamorphosed has been known for many years. It has been realized that one mineral changes into another mineral;

\*The Popular Scientific Lecture of the American Association for the Advancement of Science, complimentary to the citizens of Denver, delivered at Denver, Col., in the High School Auditorium, Monday evening, August 26, 1901.

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.